

San Bernardino Associated Governments

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•San Bernardino County Transportation Commission •San Bernardino County Transportation Authority •San Bernardino County Congestion Management Agency •Service Authority for Freeway Emergencies

DATE: November 8, 2011

TO: Contractors

FROM: San Bernardino Associated Governments

SUBJECT: Addendum #3 – I-15 La Mesa Nisqualli Interchange Project, San Bernardino County, in the City of Victorville, California, and SANBAG Contract No. C12010

Addendum No. 3 is hereby issued to the following documents for I-15 La Mesa Nisqualli Interchange project in San Bernardino County, in the City of Victorville, California.

- Invitation For Bids (IFB) C12010
- Special Provisions
- Plans

This Addendum is being issued to revise the above listed documents.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract, and the contract documents to be executed will contain a copy of this addendum.

Indicate receipt of this addendum by filling in the addendum number in the space provided on the Addenda section of the Bid to the San Bernardino Associated Governments.

The revisions and additional information described below are hereby made a part of the contract documents:

A. Changes to the Invitation for Bids (IFB):

1. Delete "Bid Item" schedule pages 14 to 25. Replace with attached pages 1 to 10 "Revised Addendum #3". Note changes:

No.	Description	Units	Quantity
52.5	STORAGE FACILITY SITE RESTORATION	LS	1
61	ROADWAY EXCAVATION	M3	126,190
61.5	DISPOSE OF OVERSIZED RUBBLE	M3	750
69	IMPORTED BORROW	M3	349,570
70	ROCK BLANKET	M2	4870
106	ARCHITECTURAL TREATMENT	M2	900
107.5	CONCRETE BLOCK WALL (F)	M2	675
108	SOUND WALL (MASONRY BLOCK) (F)	M2	3,560
141	SLOPE PAVING (CONCRETE) (F)	M3	155
237.5	72-INCH REINFORCED CONCRETE PIPE	LS	1

2. Delete Article 4 Retention/Prompt Payment of the CONTRACT replace with:

ARTICLE 4. RETENTION/PROMPT PAYMENT

Pursuant to CFR 26.29, CONTRACTOR is required to pay all subcontractors for satisfactory performance no later than 30 days from when the CONTRACTOR receives payment from the AUTHORITY. AUTHORITY shall hold retainage from CONTRACTOR of five percent (5%) from each invoice, and shall make prompt and regular incremental acceptances of portions, as determined by AUTHORITY of the contract work and pay retainage to the CONTRACTOR based on these acceptances. The CONTRACTOR or subcontractor(s) shall return all monies withheld in retention from all subcontractors within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work. Any delay or postponement of payment may take place only for good cause and with AUTHORITY's prior written approval. Any violation of these provisions shall subject CONTRACTOR to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies otherwise available to the CONTRACTOR or subcontractor in the event of; a dispute involving late payment or nonpayment by the CONTRACTOR; deficient subcontractor performance and/or non-compliance by a subcontractor. This Article applies to DBE and non-DBE contractors.

3. Delete Section 15.1 "Workers' Compensation and Employer's Liability Insurance" of the CONTRACT replace with:

- 15.1 <u>Workers' Compensation and Employer's Liability Insurance</u> Workers' Compensation insurance shall be provided in an amount and form to meet all applicable requirements of the Labor Code of the State of California Employer's Liability Insurance shall be provided in amounts not less than:
 - (a) \$1,000,000 for each accident for bodily injury by accident.
 - (b) \$1,000,000 policy limit for bodily injury by disease.
 - (c) \$1,000,000 for each employee for bodily injury by disease.

B. Changes to the Special Provisions

1. In Book 2 of the special provisions, replace first sentence Section 5-1.09, PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS

Five (5) percent retainage will be held by the agency from progress payments due the prime contractor.

2. In Book 2 of the special provisions, replace Section 5-1.28, Nonhighway Facilities (Including Utilities) with the following:

5-1.28 NONHIGHWAY FACILITIES (INCLUDING UTILITIES)

The utility owner will complete respective activities shown in the following table by the corresponding date shown:

Utility Relocation Activity and Estimated Date of completion (Addendum #3)

Utility	Location	Date
Verizon	Existing Amargosa Road (utility relocation)	March 30, 2012
Southwest Gas Corporation	New Amargosa Steel HP Gas Line (Receive Material only)	April 27, 2012

Installation of the utilities shown in the following table requires coordination with your activities. Make the necessary arrangements with the utility company through the Engineer and submit a schedule:

- 1. Verified by a representative of the utility company
- 2. Allowing at least the time shown for the utility owner to complete its work.

Utility Relocation and Contractor-Arranged Time for the Relocation (Addendum #3)

Utility	Utility Address	Location	WORK Days ¹			
		Realigned Amargosa Rd	15			
Southern California	12353 Hesperia Road	Realigned Mariposa Rd	25			
Edison Company	Victorville, CA 92395	La Mesa Road	7			
Edison Company	Victorvine, CA 92393	Nisqualli Road 7 Locust Avenue 7 Realigned Amargosa Rd 55 Realigned Mariposa Rd 30 La Mesa Road 28 Nisqualli Road 15				
		Locust Avenue	7			
		Realigned Amargosa Rd	55			
	PO Box 1498 Victorville CA 92395	Realigned Mariposa Rd	30			
Southwest Gas		La Mesa Road	28			
Corporation			15			
		Locust Avenue	7			
		Olivera Road	7			
		Realigned Amargosa Rd	5			
	7337 Central Avenue	Realigned Mariposa Rd	14			
Charter Communications	Riverside, CA 92504	La Mesa Road	7			
	Riverside, CA 72304	Nisqualli Road	7			
		Locust Avenue	7			
Verizon	16071 Mojave Drive	Realigned Mariposa Rd	30			
VCHZOH	Victorville, CA 92395	Locust Avenue	7			

- 1. All durations are based on utility company exclusive access to work area.
- 2. Southwest Gas Corporation Amargosa Roadwork cannot start before April 27, 2012
- 3. Verizon work on existing Amargosa Road scheduled to be completed by end of March 2012.
- 4. Contractor to provide 60, 30 and 7 calendar day written notice to utilities when work areas are available for utility work. Utility company and Agency are not responsible for delays due to rescheduling by Contractor or due to lack of notice by contractor.
- 5. Utilities will require curb-and-gutter to be installed prior to mobilizing.
- 6. Contractor must incorporate utility relocation durations with the baseline schedule.
- 7. Contractor to provide traffic control and water pollution control measures for all onsite utility work and relocations.

3. In Book 2 of the special provisions delete Section 10-1.10. Temporary Hydraulic Mulch (Bonded Fiber Matrix) (Section is a duplicate of 10-1.08)

4. In Book 2 of the special provisions, Section 10-1.17 Progress Schedule (Critical Path Method)

A. Under Section "Baseline Schedule," replace the first sentence of the second paragraph with:

Submit a baseline schedule within 20 days of contract Notice to Proceed.

B. In the same section, replace the last sentence of the third paragraph with:

A total of not more than 50 percent of the baseline schedule activities must be critical or near critical, unless otherwise authorized.

C. Under "Payment" of the Progress Schedule provisions, add Section 1.5

1.5. Delivery of schedule software to the Engineer and training.

5. In Book 2 of the special provisions, add the following to Section 10-1.33, Existing Highway Facilities:

Storage Facility Site Restoration

Storage facility site restoration shall include all the work described in the plans for restoration of the commercial storage site, including but not limited to concrete block wall with footings and wrought iron, trash enclosure with metal gates, pavement and gutters and any work required to restore the site to a level of functionality comparable to the preexisting condition as shown on the plans, specified in the standard specifications and as directed by the Engineer.

6. In Book 2 of the special provisions, in Section 10-1.27 Portable Changeable Message Signs, replace the paragraph titled "Measurement and Payment" with:

The contract unit price paid for portable changeable message signs includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, operating, modifying messages, maintaining portable changeable message signs, complete in place, including transporting from location to location, removing, and repairing or replacing defective or damaged portable changeable message signs, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

7. In Book 2 of the special provisions, add Section, Dispose of Oversized Rubble in Section 10-1.36 Earthwork.

Dispose of Oversized Rubble

Dispose of oversized rubble shall consist of removing and disposing of portland cement concrete or asphalt concrete rubble of 0.2 m in greatest dimension. Material to be disposed of shall be disposed of in accordance with Section 7-1.13, "Disposal of Materials Outside the Highway Right of Way," of the Standard Specifications. Oversized rubble to be disposed of will be measured and paid for by the cubic meter.

8. In Book 2 of the special provisions, in Section 10-1.43 Rock Blanket,

A. Under "Materials," replace the table with the following:

Screen Size (mm)	Percentage Passing
(11111)	
200	100
150	50-85
100	0-50

B. In the same section, under "Site Preparation," delete the third paragraph.

C. In the same section, under "Placement," replace the first paragraph with:

Rock shall be placed while concrete is still plastic, and spaced a maximum of 12 mm apart. Rocks shall have a 25 mm maximum separation between the top of adjacent rock surfaces. The Contractor shall

remove concrete adhering to the exposed surfaces of the rock. Loose rocks or rock with a gap greater than 10 mm, measured from the edge of the rock to the surrounding concrete bedding shall be reset at the Contractor's expense by methods determined by the Engineer.

D. In the same section, under "Measurement and Payment," replace the second paragraph with:

The contract price paid per square meter for rock blanket shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing rock blanket, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

9. In Book 2 of the special provisions, replace Section 10-1.58 JOINTED PLAIN CONCRETE PAVEMENT with the following:

10-1.58 JOINTED PLAIN CONCRETE PAVEMENT GENERAL

Summary

This work includes constructing jointed plain concrete pavement.

Submittals

Submit data at the web site http://169.237.179.13/cte/ for AASHTO T 336 coefficient of thermal expansion test results.

For rejected test strips, submit a plan for changed materials, methods, or equipment before constructing additional test strips.

Quality Control and Assurance

General

Perform coefficient of thermal expansion testing under AASHTO T 336 at a frequency of 1 test for each day of paving.

Perform profilograph testing on concrete shoulders. Testing and test results must comply with the specifications for concrete pavement smoothness, profilograph test procedure, and corrective action for traffic lanes.

Prepaying Conference

Meet with the Engineer at a prepaving conference at a mutually agreed time and place. Discuss methods of performing the production and paving work.

Prepaving conference attendees must sign an attendance sheet provided by the Engineer. The prepaving conference must be attended by your:

- 1. Project superintendent
- 2. Quality control manager
- 3. Paving construction foreman
- 4. Subcontractor's workers including:
 - 4.1. Foremen
 - 4.2. Concrete plant manager
 - 4.3. Concrete plant operator

4.4. Personnel performing saw cutting and joint sealing

Do not start paving activities including test strips until the listed personnel have attended a prepaving conference.

Test Strips

The first paving activity must be to construct a test strip:

- 1. 210 to 305 m long
- 2. Same width as the planned paving
- 3. With the same equipment used for the planned paving

The Engineer evaluates the test strip for compliance with the specifications for Engineer's acceptance.

The Engineer selects from 6 to 12 core locations for dowel bars and up to 6 locations for tie bars per test strip.

If you use mechanical dowel bar inserters, the test strip must demonstrate they do not leave voids, segregations, or surface irregularities such as depressions, dips, or high areas.

Allow the Engineer 3 days to evaluate the test strip for:

- 1. Smoothness
- 2. Dowel bar and tie bar alignment
- 3. Thickness
- 4. Final finishing except coefficient of friction

During the 3-day evaluation, the Engineer rejects a test strip if:

- 1. Surface varies more than 7 mm from a 3.6-mm straightedge's lower edge
- 2. Wheel path's individual high points are greater than 7.5 mm in 7.5 m
- 3. Dowel bars do not comply with specified placement tolerances
- 4. Concrete pavement thickness deficiency is greater than 15 mm
- 5. Final finishing does not comply with the specifications except coefficient of friction

Remove the test strip if the Engineer rejects it for noncompliance with the specifications for dowel bar alignment or thickness. Dispose of rejected test strip material under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

If the Engineer rejects the test strip for noncompliance with the smoothness or final finishing specifications except coefficient of friction, you may grind the test strip into compliance if you intend to leave it as part of the paving.

If the Engineer does not reject the test strip during the 3-day evaluation, you may begin production paving while the Engineer continues to evaluate the test strip for compliance with the other specifications. If the Engineer rejects the test strip for noncompliance with the other specifications, stop production paving until you construct a test strip the Engineer accepts.

Construct additional test strips until the Engineer accepts one.

Construct additional test strips if:

- 1. You propose different paving equipment including:
 - 1.1. Batch plant
 - 1.2. Paver
 - 1.3. Dowel bar inserter
 - 1.4. Tie bar inserter

- 1.5. Tining
- 1.6. Curing equipment

2. You change concrete mix proportions

The Engineer may allow paving to start without a test strip if you use a batch plant mixer, paving equipment, and personnel that completed a Department project within the preceding 12 months. Submit supporting documents and previous project information.

MATERIALS

Liquid Joint Sealant for Isolation Joints

Liquid joint sealant for isolation joints must be silicone.

Joint Seal

Use compression seal for longitudinal and transverse joints.

Joint Filler for Isolation Joints

Joint filler for isolation joints must be bituminous expansion joint filler, Type 1.

Tack Coat

Tack coat must comply with Section 39, "Hot Mix Asphalt," of the Standard Specifications.

CONSTRUCTION

Tie Bar Spacing On Curves

If the curvature of a concrete pavement slab prevents equal spacing of tie bars to maintain the minimum clearance from transverse joints, space them from 375 to 450 mm15 to 18 inches.

Transverse Contraction Joints

Transverse contraction joints must be Type A1. If widening existing concrete pavement, do not construct transverse contraction joints to match the existing pavement's joint spacing or skew unless specified. Transverse joints in concrete pavement on a curve must be on a single straight line through the curve's radius point.

Longitudinal Contraction Joints

Longitudinal contraction joints must be Type A2.

Transition Joints With Hot Mix Asphalt

If a joint between concrete pavement and hot mix asphalt is specified, apply tack coat between the concrete pavement and hot mix asphalt.

Concrete Pavement Removal

When removing and replacing concrete, remove it to full depth and width.

Crack Treatment

If cracks form that do not extend to the full depth of a slab, treat the cracks with a high molecular weight methacrylate resin under "Concrete Pavement Crack Treatment."

Removal and Replacement of Slabs Without Bar Reinforcement

For full depth and partial length slab removal, saw cut the full depth and width.

Saw cut full slabs at the longitudinal and transverse joints. Saw cut partial slabs at joints and where the Engineer orders. You may make additional saw cuts within the removal area to facilitate slab removal or to prevent binding of the saw cut at the removal area's edge. Saw cut perpendicular to the slab surface.

Use slab lifting equipment with lifting devices that attach to the slab. After lifting the slab, paint the cut ends of dowels and tie bars.

Construct transverse and longitudinal construction joints between the new slab and existing concrete using dowel bars. For longitudinal joints, offset dowel bar holes from original tie bars by 75 mm. For transverse joints, offset dowel bars holes from the original dowel bars by 75 mm.

Drill holes and use chemical adhesive to bond the dowel bars to the existing concrete. Use an automated dowel bar drilling machine. Holes must be at least 3 mm1/8-inch greater than the dowel bar diameter. Clean the holes in compliance with the chemical adhesive manufacturer's instructions. Holes must be dry when you place chemical adhesive.

Immediately after inserting dowel bars into the chemical adhesive-filled holes, support the dowel bars and leave them undisturbed for the minimum cure time recommended by the chemical adhesive manufacturer.

Clean the faces of joints and underlying base from loose material and contaminants. Coat the faces with a double application of pigmented curing compound under Section 28-1.07, "Curing," of the Standard Specifications. For partial slab replacements, place preformed sponge rubber expansion joint filler at new transverse joints in compliance with ASTM D 1752.

MEASUREMENT AND PAYMENT

If the Engineer accepts a test strip and it remains as part of the paving surface, the test strip is measured and paid for as jointed plain concrete pavement, seal pavement joint, and seal isolation joint as the case

The contract item for concrete pavement transition panel as designated in the Bid Item List is measured by the cubic meter. The Engineer calculates the pay quantity volume based on the plan dimensions. The Engineer does not measure concrete pavement placed outside those dimensions unless it was ordered by the Engineer

The contract price paid per cubic meter for concrete pavement transition panel as designated in the Bid Item List includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the concrete pavement, complete in place including bar reinforcement, tie bars, and dowel bars as shown on the plans and as specified in these specifications and the special provisions, and as directed by the Engineer.

Full compensation for providing a facility for and attending the prepaving conference is included in the contract price paid per cubic meter for jointed plain concrete pavement and no additional compensation is allowed therefor.

Full compensation for applying tack coat at transverse transition joints and end anchors is included in the contract price paid per cubic meteryard for jointed plain concrete pavement and no separate payment is made therefor.

If the curvature of a slab affects tie bar spacing and additional tie bars are required, they are included in the contract price paid per cubic meteryard for jointed plain concrete pavement and no additional compensation is allowed therefor.

10. In Book 2 of the special provisions, insert the following Section 10-1.581 CONCRETE PAVEMENT CRACK TREATMENT

10-1.581 CONCRETE PAVEMENT CRACK TREATMENT GENERAL

Summary

This work includes applying a high molecular weight methacrylate (HMWM) resin system to concrete pavement surface cracks that do not extend the full slab depth. HMWM resin system consists of:

- 1. HMWM resin
- 2. Promoter
- 3. Initiator

HMWM is not to be applied to any cracks in continuously reinforced concrete pavement.

Submittals

Before starting crack treatment, submit the following plans under the specifications for working drawings in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications:

- 1. Public safety plan for HMWM resin system
- 2. Placement plan for the construction activity
- 3. Material Safety Data Sheet for each component of the HMWM resin system

The public safety plan and the placement plan must identify materials, equipment, and methods to be used.

The public safety plan must include details for:

- 1. Shipping
- 2. Storage
- 3. Handling
- 4. Disposal of residual HMWM and the containers

The placement plan must include:

- 1. Crack treatment schedule including coefficient of friction testing
- 2. Methods and materials including:
 - 2.1. Equipment description for HMWM resin system application
 - 2.2. Equipment description for sand application
 - 2.3. Gel time range and final cure time for resin

Revise rejected plans and resubmit. With each plan rejection, the Engineer gives revision directions including detailed comments in writing. The Engineer notifies you of a plan's acceptance or rejection within 2 weeks of receiving that plan.

Submit HMWM samples 20 days before use.

Quality Control and Assurance

Before starting crack treatment, treat a 50-square meter test area within the project limits and at a location accepted by the Engineer. Use test areas outside the traveled way if available. Weather and

pavement conditions during the test crack treatment must be similar to those expected during production crack treatment. Use equipment during testing similar to those to be used during crack treatment.

For the test area and during crack treatment, use test tiles for evaluating the HMWM resin system cure time. Coat at least one 100 mm x 100 mm smooth glazed tile for each batch of HMWM resin system. Place the coated tile adjacent to the area being treated. Do not apply sand to the test tiles.

Do not start crack treatment until the Engineer accepts the test area.

The Engineer accepts a treated area if:

- 1. The corresponding test tiles are dry to the touch
- 2. The treated surface is tack-free and non-oily
- 3. The sand cover adheres enough to resist hand brushing
- 4. You remove excess sand
- 5. The coefficient of friction is at least 0.30 determined under California Test 342

MATERIALS

Promoter and initiator in the HMWM resin system must be compatible. The HMWM resin may be a prepromoted resin consisting of promoter and resin mixed together before filling containers. Identify prepromoted resin on the container label.

The resin gel time must be from 40 to 90 minutes at the application temperature. Adjust the gel time to compensate for temperature changes throughout the application.

HMWM resin must comply with:

High Molecular Weight Methacrylate Resin

Property	Requirement	Test Method
Viscosity ^a	25 cP, maximum, (Brookfield RVT with UL adapter, 50 RPM at 25 °C	ASTM D 2196
Specific Gravity ^a	0.90 minimum, at 25 °C	ASTM D 1475
Flash Point ^a	82 °C, minimum	ASTM D 3278
Vapor Pressure ^a	1.0 mm Hg, maximum, at 25 °C	ASTM D 323
Tack-free Time	400 minutes, maximum, at 25 °C	Specimen prepared under California Test 551
Volatile Content ^a	30 percent, maximum	ASTM D 2369
PCC Saturated Surface- Dry Bond Strength	3.4 MPa, minimum at 24 hours and 25 °C ±1° C	California Test 551

Note:

Sand must be commercial quality dry blast sand. At least 95 percent of the sand must pass the 2.36 mm sieve and at least 95 percent must be retained on the $850 \, \mu m$ sieve.

^a Test must be performed before adding initiator.

CONSTRUCTION

Apply HMWM resin system after any grinding.

Prevent deleterious material such as oil from being deposited on the pavement by equipment with devices such as traps, filters, and drip pans.

Before applying HMWM resin system, clean the pavement surface by abrasive blasting and blow loose material from visible cracks with high-pressure air. Remove concrete curing seals from the pavement to be treated. The pavement must be dry when blast cleaning is performed. If the pavement surface becomes contaminated before applying the HMWM resin system, clean the pavement surface by abrasive blasting.

If performing abrasive blasting within 3 m of a lane occupied by traffic, operate abrasive blasting equipment with a concurrently operating vacuum attachment.

During pavement treatment, protect pavement joints, working cracks, and surfaces not to be treated. Block drains and openings that convey water to water ways.

The machine applying HMWM resin system must combine the components by either static in-line mixers or by external intersecting spray fans. The pump pressure at the spray bars must not cause atomization. Do not use compressed air to produce the spray. Use a shroud to enclose the spray bar apparatus.

You may apply HMWM resin system manually to prevent overspray onto adjacent traffic. If applying resin manually, limit the batch quantity of HMWM resin system to 20 liters.

Do not apply HMWM resin system in more than 90 percent relative humidity. The prepared area must be dry and the surface temperature must be from 10 to $38~^{\circ}$ C when the HMWM resin system is applied. Apply HMWM resin system at a rate of 2.2 square meters per liter.

Protect existing facilities from the HMWM resin system application. Repair or replace existing facilities contaminated with HMWM resin system at your expense.

Flood the treatment area with HMWM resin system, penetrating the pavement and cracks. Apply HMWM resin system within 5 minutes after complete mixing. Mixed HMWM resin system viscosity must not increase. Redistribute excess material with squeegees or brooms within 10 minutes of application. Remove excess material from tined grooves.

Wait at least 20 minutes after applying HMWM resin system before applying sand. Apply sand at a rate of approximately one kilogram per square meter or until refusal. Remove excess sand by vacuuming or sweeping.

Do not allow traffic on the treated surface until:

- 1. Treated surface is tack-free and non-oily
- 2. Sand cover adheres enough to resist hand brushing
- 3. Excess sand is removed
- 4. Coefficient of friction is at least 0.30 determined under California Test 342

PAYMENT

Full compensation for concrete pavement crack treatment is included in the contract price paid per cubic meter for concrete pavement as designated in the Engineer's Estimate and no separate payment will be made therefor.

11. In Book 2 of the special provisions, under Section 10-1.62, Bridge Deck Surface Texture, Construction, replace the first paragraph with:

Texture the deck surfaces longitudinally using grinding and grooving as specified below.

12. In Book 2 of the special provisions, after Section 10-1.63, Structure Approach Slab (Type N), insert the following Section 10-1.635, Concrete Block Walls:

10-1.635 CONCRETE BLOCK WALLS

Concrete block walls shall be constructed in accordance with the plans, standard specifications, and the provisions in Section 10-1.64, Sound Walls, of these special provisions. Concrete block walls shall be constructed of masonry block units and supported on concrete footings as shown on the plans.

MEASUREMENT AND PAYMENT

Concrete block walls designated in the Engineer's Estimate will be measured by the square meter of the area of wall projected on a vertical plane between the elevation lines shown on the plans and length.

The contract price paid per square meter for concrete block wall designated in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the block wall, complete in place, including all excavation, minor concrete footings, backfill, and reinforcement, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Full compensation for performing testing, special inspections, and preparing all required testing and inspection reports shall be considered as included in the contract price paid per square meter for concrete block wall and no additional compensation will be allowed therefor.

13. In Book 2 of the special provisions, under Section 10-3.21, Code Division Multiple Access Assembly, CDMA Modem, replace the first paragraph with:

The modem shall be product certified by the Verizon Wireless Cellular network.

14. In Book 3 of the special provisions, add Section, City Storm Drain Improvements in Section 10-4.01.

City Storm Drain Improvements

Furnish and install concrete collar, junction structure, drop inlet, and catch basin per Greenbook and Standard Plans for Public Works Construction. 72" RCP is city supplied on-site. Contractor to provide 2 sections of 72" RCP. Remove and dispose existing 60" Spiral Wrapped Steel Pipe and other excess pipe materials on site, including but not limited to damaged pipe as described below. Material to be disposed of shall be disposed of in accordance with Section 7-1.13, "Disposal of Materials Outside the Highway Right of Way," of the Standard Specifications.

The following RCP are on site at the northeast corner of La Mesa / El Rio:

*3-72"x8' 2000-D, one has 1 ft. of exposed rebar at spigot that can be patched, all 3 can be used 2-48"x8' 2000-D, both damaged

2-42"x 4"

7-42"x8' 2000-D, 5 are beveled, only one has no damage

*1-18"x8' 2000-D

*1-18"x4' 2000-D

For bidding purposes, the starred (*) RCP can be used; the other RCP need to be disposed of. The 72" RCP will need to be constructed from STA 20+36 to 20+73 (storm drain).

Provide the following schedule of values for the lump sum work involved.

Addendum #3 – I-15 La Mesa Nisqualli Interchange Project

	SCHEDULE OF VALUES (CITY STORM DRAIN IMPROVEMENTS)						
Item	Description	Units	Quantity				
1	Furnish and install 72-Inch Reinforced Concrete	LF	16				
	Pipe						
2	Install 72-inch Reinforced Concrete Pipe	LF	24				
3	Construct Reinforced Concrete Pipe Junction	EA	1				
	Collar						
4	Construct Reinforced Concrete Reinforced	EA	1				
	Concrete Box Junction Collar						
5	Reinforced Concrete Drop Inlet	EA	1				
6	Reinforced Concrete Catch Basin	EA	1				
7	Dispose 42-Inch Reinforced Concrete Pipe	LF	60				
8	Dispose 48-Inch Reinforced Concrete Pipe	LF	16				
9	Dispose or Reuse 18-Inch Reinforced Concrete	LF	12				
	Pipe						
10	Remove and dispose 60-Inch Spiral Wrapped	LF	60				
	Steel Pipe						
	Cost Total	_					

The lump sum price paid for City Storm Drain Improvements shall include full compensation for all the work involved in completing the work described, including excavation, backfill, supplying, installing, and disposing of excess materials, minor concrete, reinforcement, in place as shown on the plans, as specified in the Standard Specifications and special provisions and no additional compensation will be allowed therefore.

15. In Book 3 of the special provisions, add Section, Jacked Pipe in Section 10-4.01.

Jacked Pipe

Perform the jack and bore operation per Caltrans specifications. Jacked Pipe shall comply with Section 55, Steel Structures of the Standards Specifications and with the enclosed document "CALTRANS ENCROACHMENT PERMITS - GUIDELINES AND SPECIFICATIONS FOR TRENCHLESS TECHNOLOGY PROJECTS". The project requirements are per the Caltrans specifications and sewer improvement plans, including the thickness of casing and type of spacers/pipe supports.

Jacked pipe will be measured and paid for by the linear foot. The contract unit price paid per linear foot for Jack and Bore Steel Sleeve of the sizes indicated on the plans includes full compensation for all the work involved in installing jacked pipe in-place, including excavation, backfill, shoring, full compliance with all the above requirements and no additional compensation will be allowed therefore.

C. Changes to the Plans

- 1. In Plan Set A, on Sheet U-5 (175 of 376) the note pertaining to the transverse FO crossing near Station "A" 169+23 should reference "E" rather than "C" (Relocation by others).
- 2. In Plan Set A, on Sheet U-12 (182 of 376) the note near the top of the sheet pertaining to "FIBER OPTIC (VERIZON) 8-102 mm CONDUIT" should reference "E" rather than "C" (Relocation by others).
- 3. In Plan Set A, replace sheet TH-18A (213A of 376) with the attached sheet 213A -Addendum #3.

- 4. In Plan Set A, replace sheet Q-3 (287 of 376) with the attached sheet 287 Addendum # 2
- 5. In Plan Set A, add sheets SW-16A and SW-16B (315A and 315B of 376) as attached sheets 315A and 315B Addendum #3.
- 6. In Plan Set A, revise the "Earthwork Summary" Table on Sheet Q-1 with the following 2 lines:

Alignment	Excavation m3	Embankment m3	Imp Borrow m3	
On-Site Stockpiles	87,300			
Total	126,190	475,760	349,570	

7. In Plan Set A, Add Addendum # 3, Exhibits 1, 2 and 3 "Existing Stockpile Locations". Existing stockpiles are provided as "Local Borrow". These exhibits depict corrected contours of existing ground compared to the surface levels reflected in the plan sheet contours. Local Borrow sites include "Oversized Rubble"

D. Response to Questions & Clarification

Response to Questions

1. Question: Request due date be extended

Response: See Addendum #2, Bid opening date extended to November 15, 2011.

2. Question: The special provisions indicate that the work shall conform to the 2006 standard plans. The 2010 standard plans are substantially different for the Type 1 and Type 5 retaining walls. Shall we use the 2006 or 2010 standard plans for retaining walls?

Response: Work described in special provisions Book 2 should conform to 2004 Standard Plans. Work described in special Provisions Book 3 should conform to 2006 Standard Plans.

3. Question: Plan sheets 64 through 67 details block walls "BW-1 and NB6-1". There does not appear to be a bid item to cover this work.

Response: See added pay item and special provisions above.

4. Question: Reference plan sheet 370 showing a portion of the bridge slope paving as rock blanket. Will this area of rock blanket be measured and paid as item 70-Rocket Blanket, or item 141- Slope Paving?

Response: Slope paving will be paid for over entire limits of the slope paving shown, including areas to receive Rock Blanket or Architectural Texture. Separate payment will be made for the areas receiving Rock Blanket or Surface Texture.

Estimated quantities of respective bid items are:

No.	Code	Description	Units	Quantity*
70	200114	ROCK BLANKET	M2	4870
106	522035	ARCHITECTURAL TREATMENT	M2	900 (F)

141 721810 SLOPE	PAVING (CONCRETE)	M3	155 (F)
------------------	-------------------	----	---------

^{* (}F) indicates final pay quantity

5. Question: Reference the bid item description for item 235-Mobilization (10% of Total cost). IS the "10% of total cost" a maximum or are we required to bid the item at 10%?

Response: Mobilization is limited to a maximum of ten percent of total bid item costs.

<u>6. Question:</u> Are Bid Items 241-245 intended to be part of the work involved in Bid Items 246-255? If so the quantities appear to be substantially high.

Response: Bid Items 241-245 are for work described in Plan Set D.

7. Question: I can't find any information regarding the 36" Jack & Bore in the project specifications. I need to know the projects requirements for this Jack & Bore and the thickness of casing and type of spacers/pipe supports required.

Response: See added special provisions above.

8. Question: Are there any shoring requirements for the Bore & Receiving pits for the 36" Jack and Bore?

Response: Conform to OSHA requirements.

9. Question: Are there any Bore & Receiving pit size requirements for the 36" Jack and Bore?

Response: Construct the bore and receiving pit size required to perform the operation. Please refer to the jack and bore guidelines and specifications document that is provided (see response to Question 8.)

10.. Question: Is bid item # 192 (AC Pavement Repair) for the waterline improvements only? How was this quantity calculated?

Response: Bid item #192 is for water line improvements described in Plan Set B. See Sheet 3 of Water Plans Construction, Note: 27

11. Question: Where does bid item # 201 go?

Response: Bid item #201 is associated with sanitary sewer improvements described in Plan Set C.

12. Question: Is bid item # 241 for the Sewer Improvements only?

Response: Bid item #241 is associated with sanitary sewer improvements described in Plan Set C.

13. Question: Are bid items # 242, 243, 244 & 245 intended for the Sewer Improvements only or are they intended for the entire project?

Response: Bid items #242, 243, 244 and 345 are associated with sanitary sewer improvements described in Plan Set C.

14. Question: On Sewer Improvements Sheet 9 of 10, what is the current max flow of existing 15" sewer line that we have to tie into? What are the sewer by-pass requirements?

Response: See enclosed flow data (Earth Tech Inc sheet 6 dated September 2006, sheet 63 dated August 2008, and sheet 64 dated August 2008). City will require sewer to be in service throughout the project. Sewer By pass requirements per Book 3 of 3.

15. Question: Special provisions section 5-1.09 states "no retainage will be held by the agency from progress payments due the prime contractors", however, Article 4 of the contract on page 38

<u>Response:</u> AUTHORITY shall hold retainage from CONTRACTOR of **five percent** (5%) from each invoice, and shall make prompt and regular incremental acceptances of portions, as determined by AUTHORITY.

16. Question: Section 15.1 on page 49 of the contract makes reference to UPRR regarding insurance. Is there Union Pacific property within the job limits and is this language correct?

Response: UPRR comments may be disregarded. Section 15 of the SCONTRACT will be revised to delete reference to UPRR

- 15.1 <u>Workers' Compensation and Employer's Liability Insurance</u> Workers' Compensation insurance shall be provided in an amount and form to meet all applicable requirements of the Labor Code of the State of California and/or the requirements of Union Pacific Railroad. Employer's Liability Insurance shall be provided in amounts not less than:
 - (a) \$1,000,000 for each accident for bodily injury by accident.
 - (b) \$1,000,000 policy limit for bodily injury by disease.
 - (c) \$1,000,000 for each employee for bodily injury by disease.

The policy must contain the following endorsement, which must be stated on the certificate of insurance: Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing the Union Pacific Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

17. Question: Specification 10-1.49 Hot Mix Asphalt states under Antistrip Treatment: 'Treat aggregate with lime slurry under "Hot Mix Asphalt Aggregate Lime Treatment - Slurry Method" and Specification 10-1.50 Hot Mix Asphalt (Type C) page 491 states: 'Choose an antistrip treatment and use the corresponding laboratory procedure for the mix design in compliance with;" which provides the use of the 3 different antistrip treatment methods. Are all 3 methods acceptable for selecting the antistrip treatment since the specifications intent and goal is to meet a minimum tensile strength ratio not less than 70?

Response: Multiple options are offered for anti-strip treatment.

18. Question: Specification 10-1.51 Hot Mix Asphalt Type A - Bond Breaker: Page 500 requires an Asphalt Binder of PG64-16. Caltrans requires a PG64-10 for Bond Breaker. Will PG64-10 be acceptable as per Caltrans requirements?

Response: Binder type shall be PG64-16.

19. Question: Specification 10-1.51 Hot Mix Asphalt Type A - Bond Breaker: Page 501 requires an 'Antistrip Treatment' of lime slurry for Bond Breaker. Caltrans nor the project specifications require a

minimum tensile strength ratio for Bond Breaker Why is antistrip being required for bond breaker? If antistrip is required will Liquid antistrip be acceptable?

Response: Multiple options are offered for anti-strip treatment.

20. Question: Specification 10-1.52 Rubberized Hot Mix Asphalt (Gap Graded): Page 503 requires an 'Antistrip Treatment' of lime slurry again with no specified requirement for a minimum tensile strength ratio. Why is the antistrip being required? The Rubberized Hot Mix Asphalt (Gap Graded) constructed by CT on the North & South bound lanes of the I-15 from Main street to 'D' Street which is where this project is located also did not require an antistrip treatment of lime slurry.

Response: Multiple options are offered for anti-strip treatment.

21. Question: Specifications 10.-1.54, 10.1.55 and 10.1.56 are for the antistrip treatments (Lime slurry method, dry lime method and liquid antistrip method. Are all 3 methods to be used on Type C HMA as specified?

Response: Multiple options are offered for anti-strip treatment.

22. Question: The last group of bid items on the bid schedule are in imperial units. Can these be changed to match the rest of the metric unit bid items? And what area of work do these imperial units cover?

Response: Items of work listed in US Customary units are associated with work described in special provisions Book 3, Plan Sets B, C and D. Work is to remain in US Customary units.

23. Question: Please provide information listing two import dirt sources.

Response: See "Supplemental Information" Posted to SANBAG Website 11/2/11 and changes below to "Comments From Pre-Bid Meeting 10-26-11" Posted to SANBAG Website 11/2/11. Delete previous comments and replace as noted below. Provided for "Information Only"

SAN BERNARDINO ASSOCIATED GOVERNMENTS INTERSTATE 15/LA MESA/NISQUALLI INTERCHANGE PROJECT Comments from Pre-Bid Meeting 10-26-11 (Updated)

- 1. As noted in the Bid documents the City of Victorville has presently stockpiled approximately 51,000 m³ of soil material at various locations within the project site. Locations are visible on the site. A sketch showing the location of the dirt stockpiles will be provided in provided in Addendum # 2. Stockpiled material includes broken concrete and asphalt.
- 1. As noted in **revised Table on Sheet Q-1** (**Addendum** # 3) in the Bid documents, Agency has stockpiled approximately <u>87,300 m</u>³ of soil material at various locations within the project site. Locations are visible on the site. A sketch showing the location of the dirt stockpiles is provided in provided in <u>Addendum</u> # 3. Stockpiled material includes broken concrete and asphalt.
- 2. The City of Victorville expects to stockpile another 84,000 m3 of soil material at or adjacent to the project site. Schedule for delivery of that material is expected to be completed by date of Contract Award, however exact timelines have not yet been finalized. A sketch showing the location of the dirt stockpiles will be provided in provided in Addendum # 2.
- 2. The City of Victorville <u>will not</u> stockpile another 84,000 m3 of soil material at or adjacent to the project site.

24. Question: Bid items 71 & 72 are for 100 mm & 19 mm rock but we haven't seen a spec for installed depth. Typically, 100 mm rock can be a single layer but 19 mm can be anywhere from 1" to 3" deep.

Response: Gravel (Type 1 or Type 2) should be installed to a depth that is approximately equivalent to the nominal rock size specified.

<u>25. Question:</u> Bid item 73 - boulders; the specs refer to the plan sheets for size but we haven't seen anything in the plan sheets other than location.

Response: Boulders should be nominal 1/2 tonne.

26. Question: Can you provide the name of the water agency for this project?

Response: City of Victorville is the local water agency.

27. Question: Is it allowable to bury, within the embankment, the existing rubble consisting of broken AC and Concrete located at the SW corner of La Mesa/Amargosa Road?

Response: See Material Handout – Addendum # 3. Oversize rubble cannot be buried on site.

28. Question: The layout drawings show limited asphalt concrete pavement removal and obliteration of AC. There are additional significant areas which are not depicted to be removed or obliterated on the layout drawings. Please advise.

Response: Removal or obliteration is required only in areas designated unless otherwise required in the Standard Specifications.

29. Question: On Layout (L-8) shows a "Block Wall" to be constructed. There are no construction details for this item. Also, there is no bid item for this work as well.

Response: Refer to Plan Sheets C-16 through C-19 and bid item addition above.

<u>30. Question:</u> Reference bid item no. 185 - Electric Service (irrigation) per special provisions section 10-3.08, pg 599, the bid item is described to include conductors, conduit and pull boxes from service points to irrigation controllers as shown on the plans. Nor electrical or irrigation plans show the service conduit conductors or pull boxes.

Response: Electric Service (Irrigation) is to be located adjacent to irrigation controllers. Electric Service components to be provided by the Contractor.

<u>31. Question:</u> Reference SSP Section 10-3.13 pg 623: Section called 'Responsibilities' requires that the contractor demonstrate that EVP equipment shall meet specifications. The plans call out already the manufacturer and model of the Emergency vehicle pre--emption units to be 3M, model 752. Will the contractor still be required to demonstrate that equipment meets specifications?

Response: Contractor is required to demonstrate that EVP equipment meets specifications.

32. Question: Plan sheet E-5. At the NE corner of the intersection plans call out SCE Power source CI: P5575406. Will contractor be responsible to install the pull box and 3" conduit from service cabinet? If so, provide type of pull box.

Response: SCE power source location shown schematically. Contractor shall be responsible for providing 76 mm (3-inch) conduit from service location to meter pedestal.

33. Question: On sheets 300 thru 315 of the project plans, the sound wall profiles and details are shown. Sound walls "NB 6-3" & "NB 6-5" both have portions of CMU sound wall that are built on top retaining walls. Usually there is a CMU design reinforcement table or structure detailed sheet for CMU walls on retaining walls that show whether or not high stress units are required for these walls. Usually this sheet is toward the end of the sound walls plans, where it details whether the entire wall requires high stress or only certain portions, (min height) are to be built with high stress CMU. There are no sheets in this section. Furthermore, if you were to reference CT 2004 std plans and plates, you won't find an example of a CMU wall built on a retaining wall. These sheets are specially designed and inserted into the project, on a per project basis. Please clarify or insert a correct design section of the CMU on retaining wall that shows whether or not high stress CMU is required.

Response: Added Plan sheets SW-16A and SW-17B included in this addendum.

<u>34. Question:</u> Reference plan sheet 51 of 376, Construction Details C-3. The following construction notes appear to have no corresponding bid items. CN 50, New Block Wall. CN 51, New Screen Wall with Wrought Iron. CN 54, New Trash Enclosure. Please review.

Response: See added lump sum pay item, **Storage Facility Site Restoration**, and special provision provided in this addendum.

35. Question: Reference Plan Set C, sheet 1 of 5 of La Mesa Storm Drain Plans. CN 4 indicates 72" RCP. There appears to be no bid item for this work. Please review.

<u>Response</u>: See added lump sum pay item, **72-Inch Reinforced Concrete Pipe**, and special provision provided in this addendum. Pipe on site - the 72" RCP will need to be constructed from STA 20+36 to 20+73 (storm drain).

36. Question: What bid items is to cover Sheets 1 thru 5 of City of Victorville storm drain work?

Response: See added lump sum pay item, **72-Inch Reinforced Concrete Pipe**, and special provision provided in this addendum.

37. Question: Item 241, Trench Cuts, what does this cover?

Response: Item 241 is associated with City communications facilities described in Plan Set D.

38. Question: There are several drawings that show "REVISED PER ADDENDUM NO. 1 DATED SEPTEMBER 14, 2011", however, the project was advertised on October 14th, 2011. Are we to recognize addendum 1 and any other forthcoming addenda sequentially? This could be grounds for a protest by a respective bidder if the proper language is not incorporated into the bid package which would result in unnecessary delays to the project.

Response: All elements of Addendum #1 are included in the bid documents released October 14, 2011. Bidders are still required to acknowledge receipt of the addendum.

39. Question: There are several paragraphs in the special provisions pertaining to federal aid project requirements; however, the project is locally funded. Are these specifications appropriate?

Response: Project is locally funded.

<u>40. Question:</u> The Engineers Estimate quantity for Sound wall NB 6-5 on Sheet No. 303 is incorrect. It should be "2947.22 M2". If you take the length of 690.701M x a CMU height of 4.267M, as listed in the project plans, the quantity comes out to 2947.22 M2, not 2533.2 M2. If this is corrected, then Bid Item No. 108 also needs to be increased as well as it is a final pay quantity. Please give me a call if you have questions.

Response: Bid item for Sound Wall (Masonry Block) will be increased by 414 M2 to 3560 M2 (final pay quantity).

41. Question: Can SANBAG provide a soils Report?

Response: Materials Report and Geotechnical Design Report are available on the SANBAG website.

42. Question: No information is provided to require over excavation/recompaction to a specified depth of the existing ground prior to placing fill?

Response: Over excavation is not required.

43. Question: Construction phase 1A requires the bridge abutments be constructed while Mariposa and Armargosa are open to traffic. The abutments are placed in new fill. Mariposa is temporally relocated to the east, allowing only 60' of work space. Armargosa's abutment is located right at the edge of pavement, allowing no room for new fill our abutment construction. Can you address this?

Response: Abutment 1: Amargosa traffic is currently two lanes in each direction, with a left turn pocket lane. Traffic is to be reduced to one lane southbound and two lanes northbound, and shifted by the Contractor to the eastern portion of the existing pavement to allow for abutment construction. Abutment 3: Mariposa temporary detour shifts traffic enough to permit fill to be constructed up to the bottom of the abutment footing, with slopes and a level work area around the footing. Embankment construction east of the abutment cannot occur until traffic is shifted to the newly aligned Mariposa. See Plan Sheets SC-1A (186A of 376) and SC-2A (187A of 376).

44. Question: The plans call for a coldmill of existing pavement on Mariposa and Armargosa at various locations, but do not call out any new asphalt overlay in these areas. Is this correct?

Response: Provide minimum 30 mm HMA overlay for all cold planed areas on existing asphalt pavement.

45. Question: Who will perform survey and quality control (testing)?

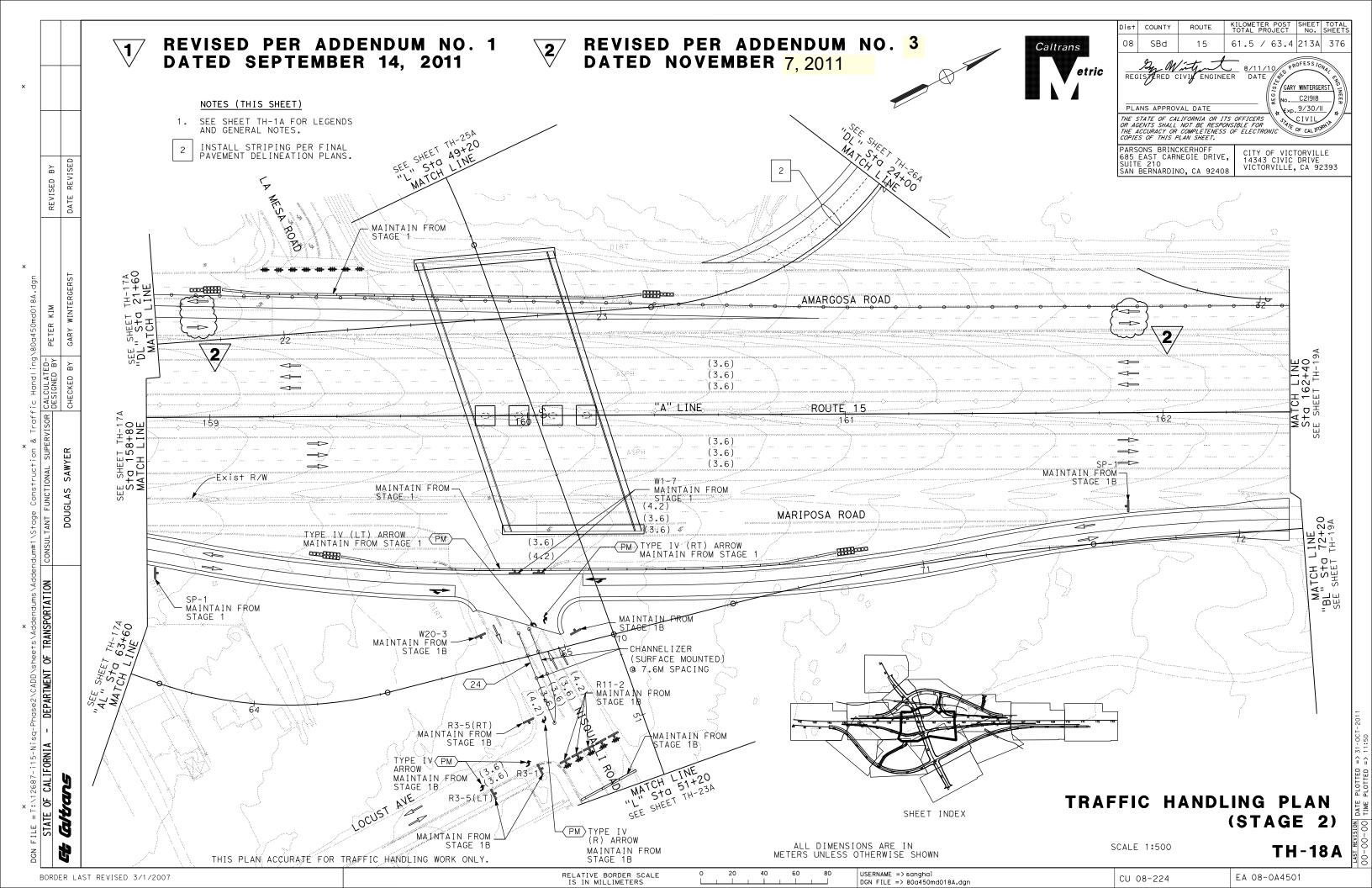
Response: Quality Assurance survey and testing to be provided by construction manager.

46. Question: The plans do not address any asphalt repair of the Church parking lot where the retaining wall is constructed?

Response: Comply with details on Plan Sheet C-10 (58 of 376, Note 62) and with Section 15-1.02 of the Standard Specifications:

15-1.02 Preservation of Property

- Existing facilities which are to remain in place shall be protected in conformance with the provisions in Sections 7-1.11, "Preservation of Property," and 7-1.12, "Indemnification and Insurance," and in Section 8-1.10, "Utility and Non-Highway Facilities."
- Trenches, holes, depressions and pits caused by the removal of highway facilities shall be backfilled with embankment material as provided in Section 19, "Earthwork." Trenches, holes, depressions and pits caused by the removal of highway facilities that are in surfaced areas, otherwise to remain undisturbed, shall be backfilled with materials equal to or better in quality and to the same thicknesses as the surrounding materials.



REVISED

80 SBd 61.5 / 63.4 287 376 15 REGISTERED CIVITY ENGINEER

8/11/10 ROFESS JONA
DATE
AND WINITEDERS

PLANS APPROVAL DATE

No. C21918 Exp. 9/30/II THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

PARSONS BRINCKERHOFF 685 EAST CARNEGIE DRIVE, SUITE 210 SAN BERNARDINO, CA 92408

CITY OF VICTORVILLE 14343 CIVIC DRIVE VICTORVILLE, CA 92393

GARY WINTERGERST

. CIVIL

MINOR CONCRETE

	(MISCELLANEOUS CONSTRUCTION)											
SHEET	SIDE	EWALK		D GUTTER A2-200)		(TYPE 200)	CROSS	GUTTER	DRIV	EWAYS	*SEAL ISOLATION	LOCATION
No.	AREA	VOLUME	LENGTH	VOLUME	LENGTH	VOLUME	AREA	VOLUME	AREA	VOLUME	JOINT	LOCATION
	m2	m3	m	m3	m	m3	m2	m3	m2	m3	LENGTH	
	(N)		(N)		(N)		(N)		(N)		(m)	
L-1	73.8	7.4	125.1	19.4	6.4	0.5					125.1	"SM" LINE R†
L-2	195.9	19.6	92.4	14.3							92.4	"AM" LINE L†
L-3	459.8	46.0	203.2	31.5							203.2	"L" LINE R+&L+
L-4	662.8	66.0	280.8	43.5	29.2	2.2	90.4	18.1	77.4	15.7	280.8	"AM" LINE L+, "OL" LINE R+
L-5	410.8	41.0	358.7	55.6	8.0	0.6					179.5	"NM" LINE R+
L-6	71.4	7.0	39.7	6.2							39.7	"NM'LINE R+
L-7			279.4	43.3							279.4	"SM" LINE R+
L-8	454.6	45.0	1102.7	170.9	32.6	5.1	99.5	19.9	188.2	38.2	1102.7	"LO" LINE R+&L+
L-9	1448.5	144.9	742.6	115.1							742.6	"L", "SM" & "NM" LINES R+&L+
L-10	707.2	70.7	297.2	46.1							297.2	"NM" LINE R+
L-11	338.3	33.8	290.6	45.0					32.2	6.5	290.6	"L" LINE R+&L+
L-12	1359.5	136.0	609.8	94.5	10.9	1.7			28.4	5.8	609.8	"AM" & "L" LINES R+&L+ (includes island)
L-13	756.0	75.6	308.9	47.9	158.2	24.5					308.9	"AM" LINE L+
L-14	388.5	38.9	169.2	26.2					27.8	5.6	169.2	"L" LINE L†
												~~~~~
TOTAL	7327.1	731.9	4900.3	759.5	245.3	34.5	189.9	38.0	354.0	71.8	4721.1	\\(\frac{1563.9}{1635.7}\)
(N) = Not o	a separa	te pay ite	em									

TOTAL QUANTITY ADDED TO THE TABLE FOR "ROADWAY PAVEMENT QUANTITIES" ON SHEET Q-2

### **ROCK BLANKET**

SHEET NO.	LOCATION	(MISCELLANEOUS AREA)
		m
L-2	60+80.9, 3.6.0 Rt To "AL" 61+30.6, 7	220.0
L-3	" 21+88.4, 3.7 Rt To "DL" 22+47.4, 7.9	272.8
L-3	" 21+88.4, 3.7 RT To "DL" 22+47.4, 7.9	272.8
L-4	" 73+30.1, 7.8 L+ TOBL" 73+92.2, 3.	285.1
L-4	" 33+90.1, 8.1 Rt To "CL" 34+40.6, 7.2	240.1
SUBTOTAL		1290.8
	QUANTITY FROM EROSION CONTROL	2018.2
TOTAL		3309.0

#### CLASS 2 AGGREGATE BASE

	(MISCELLANEOUS CONSTRUCTION)									
SHEET	ADA CUF	RB RAMP		) GUTTER 42-200)	CROSS	GUTTER	DRIVE	EWAYS	LOCATION	
No.	AREA	VOLUME	LENGTH	VOLUME	AREA	VOLUME	AREA	VOLUME	LOCATION	
	m2	m3	m	m3	m2	m3	m2	m3		
	(N)		(N)		(N)		(N)			
L-1	21.9	4.4	125.1	7.8					"SM" LINE R†	
L-2		0.0	92.4	5.7					"AM" LINE L+	
L-3	83.5	16.7	203.2	12.6					"L" LINE R+&L+	
L-4	19.7	3.9	280.8	17.4	90.4	18.1	77.4	15.5	"AM" LINE L+, "OL" LINE R+	
L-5	17.1	3.4	358.7	22.2					"NM" LINE R+	
L-6			39.7	2.5					"NM" LINE R+	
L-7			279.4	17.3					"SM" LINE R+	
L-8	32.3	6.5	1102.7	68.4	99.5	19.9	188.2	37.6	"LO" LINE R+&L+	
L-9	163.6	32.7	742.6	46.0					"L", "SM" & "NM" LINES R+&L+	
L-10	9.7	1.9	297.2	18.4					"NM" LINE R†	
L-11	23.4	4.7	290.6	18.0			32.2	6.4	"L" LINE R+&L+	
L-12	126.0	25.2	609.8	37.8			28.4	5.7	"AM" & "L" LINES R+&L+	
L-13		0.0	308.9	19.2					"AM" LINE L+	
L-14	14.8	3.0	169.2	10.5			27.8	5.6	"L" LINE L†	
									~~~~~	
TOTAL	512.0	102.4	4900.3	303.8	189.9	38.0	354.0	70.8	⟨ -515.5 - 515 ⟨	
(N) = Not c	N)= Not a separate pay item									

	REVISIONS							
MARK	MARK DATE DESCRIPTION BY							
1	09-14-2011	ADDENDUM #1	GW					
/2	11-02-2011	ADDENDUM #2	GW					

#216

SHEET NO.	LOCATION	(MISCELLANEOUS AREA) m ²
L-2 L-3 L-3, L-4 L-4	"AL" 60+80.9, 3.5 L+ To "AL" 61+30.6, 7.7 L+ "DL" 21+88.8, 3.7 R+ To "DL" 22+47.4, 7.9 R+ "BL" 70+60.7, 28.8 L+ To "BL" 72+39.2, 9.0 L+ "BL" 73+30.5, 7.8 L+ To "BL" 73+92.2, 3.9 L+ "CL" 33+90.1. 8.1 R+ To "CL" 34+40.3, 3.8 R+	220.0 272.8 1,223.1 288.6 240.7
L-4 L-13 SUBTOTAL	"CL" 33+90.1, 8.1 Rt To "CL" 34+40.3, 3.8 Rt "CL" 30+22.4, 5.7 Rt To "CL" 30+97.2, 5.7 Rt	240.7 471.5 2,716.7
TOTAL	QUANTITY FROM EROSION CONTROL QUANTITY FROM BRIDGE SLOPE	2,018.2 132.7 4,867.6

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NO SCALE Q-3

BORDER LAST REVISED 3/1/2007

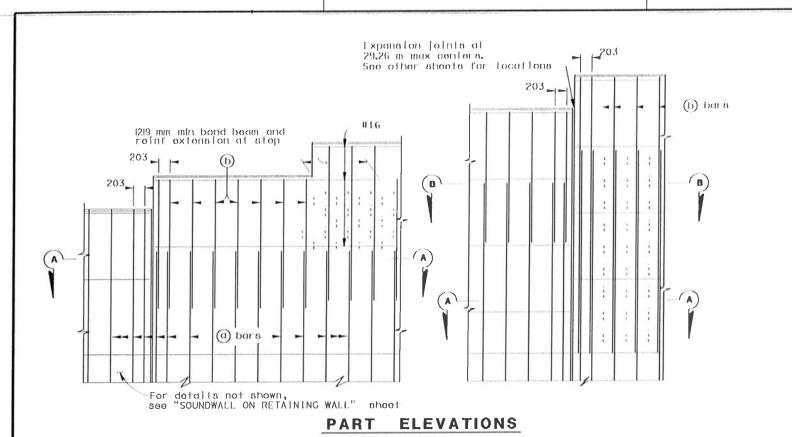
RELATIVE BORDER SCALE IS IN MILLIMETERS

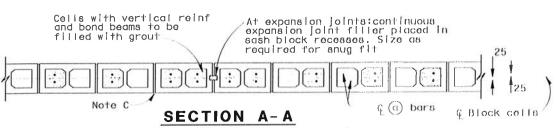
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CU 08-224

EA 08-0A4501

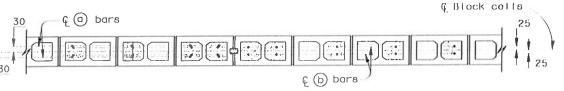
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For details not shown, see other details

H=1829 THRU H=3048



SECTION A-A

ADDED PER ADDENDUM #3

SECTION B-B

For details not shown, see other details

H=3658 THRU H=4877

SOUNDWALL REINFORCEMENT TABLE Compressive Strength of CMU (a) bars (b) bars f'm Maximum Maximum (MPa) MPa @ 406 max @ 406 max 1829 10.34 13.1 #13 1829 13.1 2438 10.34 2438 3048 10.34 13.1 3048 #13 19.31 3658 13.79 3658 #16 #13 1829 25.86 4267 #13 2438 17.24 4267 #19

17.24

3048



DESIGN NOTES

DESIGN

Uniform Building Code,1997 Edition and the Bridge Dealgn Specifications.

DESIGN WIND LOAD 1293 Pa

DESIGN SEISMIC LOAD

0.57 Doad Load

CONCRETE MASONRY

EINFORCED CONCRETE	REGULAR STRENGTH	HIGH STA	ENGTH
f'c = 22.408 Mpa fy = 413.688 MPa	f'm = 10.34 MPa fb = 3.41 MPa fa = 165.5 MPa n = 25.ft	f'm = 13.79 MPa fb = 4.55 MPa fb = 165.5 MPa n = 19.3	f'm = 17.24 MPa fb = 5.72 MPa fb = 165.5 MPa n = 15.5

4877

LOAD FACTORS AND LOAD COMBINATIONS

Working Stroom Dowlgo (WSD) Percentage of unit alreas 100% Group 1: D + E + SC Group 2: D + W + SC + E 100% 100% Group 3: D + 0.71 EQD + E

Whoro:

Load Factor Design (LFD) Group A: BD +1.7 E + 1.7 SC Doad Load Group B: DD +1.7 E + 1.3 W Group C: DD +1.3 E + 1.0 EQE Group D: DD +1.3 E + 1.0 EQD = Lateral earth pressure SC = 1 lyn Load nurcharan = Wind Load Group E: | D + 1.1 E + 0.85 (EOE + EQD)

Whore: $\beta = 0.9$ or 1.2, whichever controls in design D = Doad Load

= Lateral earth pressure SC = Livo load surchargo W = Wind load EOD = Solamic doad load

EQE = Salamic earth load

STRENGTH REDUCTION FACTORS,

EQD = Solumic dood load

Roinforcod c For For	oncrolo: floxuro — — — — — — — — — — — — — — — — — — —	Ø=0.90 Ø=0.85
Concrete mass for for	onry: Floxuro	Ø=0.80 Ø=0.60
Foundallons: Soo	"RETAINING WALL WITH SOUNDWALL" a	hoola

25.86

GENERAL NOTES

Note A: For type of block and joint finish,

See other sheets.

Note B: When blocks are laid in stacked bond, ladder type, galvanized joint reinforcement shall be provided. A minimum of 2-3.76 mm wires continuous at 1219 mm maximum to be used. Locate reinforcement in Joints that are at the approximate midpoint between bond beams.

Note C: Horizontal joints shall be tooled concave or may be weathered.

Vertical joints shall be tooled concave or may be raked.

Note D: For intermediate wall heights that are between the "H's" given. Use the tabular information for the next higher "H".

Note E: Masonry strengths are listed in the

"SOUNDWALL REINFORCEMENT TABLE".

SW-16A

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ADDED I ENTABBEI	150111 110			NO SCALE		
STANDARD	DRAWING		STATE OF	DIVISION OF	BRIDGE NO.	SOUNDWALL ON RETAINING WALL-MA
RELEASE 9/8/03 DESIGN DY D. DUNRUD	CHECKED W.C. WALKER	HELEASED BY	CALIFORNIA	ENGINEERING SERVICES	KILOMETER POST	DETAIL 0 NO 4
FILE X815-120-1 SUBMITTED BY P. DUNRUD	DHAWING 11/94	Probesto Tomalle	DEPARTMENT OF TRANSPORTATION	ENGINEERING SERVICES		DETAILS NO. 1
DS 050 2147A (METRIC) (NCV, 2/25/97)	DATE	OLLICE CHIEL	ORIGINAL SCALE IN MILLIMETERS	ch	DISREGARD PRI	INTS DEARING STON DATES PREVISION DATES (PRELIMENTRY STAGE OFF.Y)

4877

#19

#13

KILOMETER POST TOTAL PROJECT

61.5 / 63.4

WM1/10

NO.

315A

GARY WIRTERGERS C21918 9730713

CHY OF VICTOVILLE 19343 CIVIC DRIVE VICTORVILLE, CA 02303

ROUTE

SISPERED CIVIL ENGINEER

the State of Catternia or its officers or agents nhall not be reaponable for the accuracy or completeness of electronic copies of this plan sheet

COUNTY

PLANS APPROVAL DATE

PARSONS DRINCKERHOLF

BAN DERNARDINO, CA 92400

BUITE 210

RETAINING WALL-MASONRY BLOCK



315B 61.5 / 63.4

PLANS APPROVAL DATE

The State of California or its officers or age shall not be responsible for the accuracy or completeness of electronic caples of this plan shaet

PARBONS DRINCKERHOLF BALL CARNE SHE DRIVE, BUILE 210 BALLIE RARBARD, CA 102400

CITY OF VICTORVILLE 14343 CIVIC DRIVE VICTORVILLE, CA 92393

GARY WINTERGERS C21918 (Exp. 9/30/13

Dotall "A" Expansion foint in rotaining wall 10 num Expanation Joint filter

ALIGNMENT KEY DETAIL

H=1829 THRU H=3048 For details not shown, see H=3658 thru H=4877

180° hooks.

Turn hooks as regulred

Mortar cap

203 x 203 x 406 concrete block -(a) bara ||

Bond boam at top and at 1219 mm max!mum contors bolow

Approx finished

© Full mortar bod Joint

at top of rotaining watt

Rotaining wall reinforcement not shown, see "RETAINING WALL WITH SOUNDWALL" sheets

M16 cont at each bond beam 102 mm wldo 52 mm deep opening, typ

H=3658 THRU H=4877 For dotalls not shown, soo H=1829 Thru H=3048

(b) bars

-(a) bara & Block

1113 😭 @ 406

135 ° hook

Retaining watt reinf

TYPICAL SECTIONS

Enclose portion of #19 bar In 13 mm minimum thickness of oxpanded polystyrene thus: 150 HI19 x 457 mm Galvanizod - 13 min - 13 cir DETAIL A

NO SCALE

SW-16B

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

SOUNDWALL - MASONRY BLOCK ON RETAINING WALL STATE OF STANDARD DRAWING DIVISION OF STRUCTURES **CALIFORNIA** FILE NO. X815-120-2 DESIGN D. DUNRUD W.C. WALKER STRUCTURE DESIGN 18 DETAILS NO. 2 W.G. WALKER ETAILS BY R. YEE Phobets Lowelle DEPARTMENT OF TRANSPORTATION UBMITTED BY, D. DUNRUD DISREGARD PRINTS BEARING EARLIER REVISION DATES -DS OSD 2147A (METRIC) (REV. 2/25/97)

ADDED PER ADDENDUM #3

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
1				PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1		
2				TIME RELATED OVERHEAD	WDAY	335		
3				RESIDENT ENGINEER'S OFFICE	LS	1		
4				TEMPORARY FENCE (TYPE ESA)	M	4,010		
5				CONSTRUCTION SITE MANAGEMENT	LS	1		
6	S			ASBESTOS HEALTH AND SAFETY PLAN	LS	1		
7	S			PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1		
8				TEMPORARY CONSTRUCTION ENTRANCE	EA	15		
9				TEMPORARY COVER	M2	15,200		
10				TEMPORARY CHECK DAM	M	1,380		
11				TEMPORARY DRAINAGE INLET PROTECTION	EA	34		
12	S			TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	M2	19,500		
13				STREET SWEEPING	LS	1		
14				TEMPORARY CONCRETE WASHOUT BIN	EA	10		
15				STORM WATER ANNUAL REPORT	LS	1		
16				CONSTRUCTION AREA SIGNS	LS	1		
17				TRAFFIC CONTROL SYSTEM	LS	1		
18				TYPE III BARRICADE	EA	200		
19				TEMPORARY PAVEMENT MARKING (PAINT)	M2	87		
20				TEMPORARY TRAFFIC STRIPE (PAINT)	M	9,840		
21				CHANNELIZER (SURFACE MOUNTED)	EA	600		
22				TEMPORARY PAVEMENT MARKER	EA	2,270		
23				PORTABLE CHANGEABLE MESSAGE SIGN	EA	10		
24				TEMPORARY RAILING (TYPE K)	M	2,490		
25	S			TEMPORARY CRASH CUSHION MODULE	EA	140		
26				TEMPORARY TRAFFIC SCREEN	M	2,240		
27	S			REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS MATERIAL)	M	130		

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
28	S			CONTRACTOR SUPPLIED BIOLOGIST	LS	1		
29	S			NATURAL RESOURCE PROTECTION PLAN	LS	1		
30				OBLITERATE SURFACING	M2	10,400		
31				REMOVE SPLIT RAIL FENCE	M	52		
32				REMOVE FENCE WITH WROUGHT IRON	M	16		
33				REMOVE WOOD FENCE	M	54		
34				REMOVE FENCE	M	29		
35				REMOVE CHAIN LINK FENCE	M	2,570		
36				REMOVE GATE	EA	11		
37				REMOVE METAL BEAM BARRIER	M	140		
38				REMOVE YELLOW PAINTED TRAFFIC STRIPE	M	5,140		
39				REMOVE TRAFFIC STRIPE	M	2,920		
40				REMOVE PAVEMENT MARKING	M2	35		
41				REMOVE THERMOPLASTIC TRAFFIC STRIPE	M	11,300		
42				REMOVE PAVEMENT MARKER	EA	2,430		
43				REMOVE ROADSIDE SIGN	EA	44		
44				REMOVE ASPHALT CONCRETE	M2	5,510		
45				REMOVE ASPHALT CONCRETE DIKE	M	530		
46				REMOVE PIPE	M	7		
47				REMOVE REINFORCED CONCRETE BOX CULVERT	M	25		
48				RELOCATE ROADSIDE SIGN (ONE POST)	EA	7		
49				REMOVE COMMERCIAL SIGN	EA	1		
50				RELOCATE PARKING LOT LIGHT	EA	10		
51				RELOCATE ATHLETIC FIELD LIGHT	EA	3		
52				RELOCATE FRAMED SIGN PANEL	EA	1		
52.5				STORAGE FACILITY SITE RESTORATION	LS	1		
53				ADJUST FRAME AND COVER TO GRADE	EA	6		

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
54				COLD PLANE ASPHALT CONCRETE PAVEMENT (60 MM MAXIMUM)	M2	7,580		
55				COLD PLANE ASPHALT CONCRETE PAVEMENT (75 MM MAXIMUM)	M2	320		
56				REMOVE CONCRETE	M3	60		
57				REMOVE CONCRETE SIDEWALK AND DRIVEWAY	M3	150		
58				REMOVE CONCRETE (CURB AND GUTTER)	M3	370		
59				CLEARING AND GRUBBING	LS	1		
60				DEVELOP WATER SUPPLY	LS	1		
61				ROADWAY EXCAVATION	M3	126,190		
61.5				DISPOSE OF OVERSIZE RUBBLE	M3	750		
62				LEAD COMPLIANCE PLAN	LS	1		
63		F	В	STRUCTURE EXCAVATION (BRIDGE)	M3	1,620		
64				STRUCTURE EXCAVATION (RETAINING WALL)	M3	4,310		
65		F	В	STRUCTURE BACKFILL (BRIDGE)	M3	1,000		
66				STRUCTURE BACKFILL (RETAINING WALL)	M3	6,620		
67		F		PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	M3	967		
68				DITCH EXCAVATION	M3	1,120		
69				IMPORTED BORROW	M3	349,570		
70				ROCK BLANKET	M2	4,870		
71				GRAVEL (TYPE 1)	M2	30,200		
72				GRAVEL (TYPE 2)	M2	6,090		
73				BOULDERS	EA	95		
74				HYDRAULIC MULCH (BONDED FIBER MATRIX)	M2	48,500		
75				FIBER ROLL	M	9,390		
76				MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	4		
77				TRANSPLANT TREE (JOSHUA)	EA	7		
78	S			IRRIGATION SYSTEM	LS	1		
79			В	NP3 SUPPLY LINE (BRIDGE)	M	120		

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
80				300 MM CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT	M	91		
80				FOLTETITILENE FIFE CONDUIT	IVI	91		
81				CLASS 2 AGGREGATE SUBBASE	M3	1,520		
82				CLASS 2 AGGREGATE BASE	M3	34,200		
83				LEAN CONCRETE BASE	M3	1,020		
84				HOT MIX ASPHALT (TYPE A)	TONN	2,190		
85				RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TONN	1,230		
86				HOT MIX ASPHALT (TYPE C)	TONN	55,500		
87				HOT MIX ASPHALT (TYPE A BOND BREAKER)	TONN	590		
88				DATA CORES	LS	1		
89				PLACE HOT MIX ASPHALT DIKE (TYPE C)	M	97		
90				PLACE HOT MIX ASPHALT DIKE (TYPE D)	M	2,260		
91				LIQUID ASPHALT (PRIME COAT)	TONN	96		
92				TACK COAT	TONN	77		
93				CONCRETE PAVEMENT (RAMP TERMINI)	M3	2,280		
94	S			SEAL PAVEMENT JOINT	M	4,110		
95	S			SEAL ISOLATION JOINT	M	4,840		
96			В	FURNISH STEEL PILING (HP 360 X 132)	M	3,601		
97			В	DRIVE STEEL PILE (HP 360 X 132)	EA	284		
98				400 MM CAST-IN-DRILLED-HOLE CONCRETE PILING (SOUND WALL)	M	810		
99			В	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	1		
100		F	В	STRUCTURAL CONCRETE, BRIDGE FOOTING	М3	474		
101		F	В	STRUCTURAL CONCRETE, BRIDGE	M3	3,080		
102				STRUCTURAL CONCRETE (RETAINING WALL)	M3	2,230		
103		F	В	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	М3	240		
104		F		CLASS 1 CONCRETE (STRUCTURE)	М3	2,964		
105		F		MINOR CONCRETE (MINOR STRUCTURE)	M3	306		
106		F	В	ARCHITECTURAL TREATMENT	M2	900		

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
107				MINOR CONCRETE (PILE CAP)	M3	172		
107.5		F		CONCRETE BLOCK WALL	M2	675		
108		F		SOUND WALL (MASONRY BLOCK)	M2	3,560		
109			В	JOINT SEAL ASSEMBLY (MR 70 MM)	M	44		
110				JOINT SEAL (MR 50 MM)	M	43		
111		F		BAR REINFORCING STEEL	KG	357,939		
112			В	BAR REINFORCING STEEL (BRIDGE)	KG			
		F		, , ,		498,040		
113		F		BAR REINFORCING STEEL (RETAINING WALL)	KG	138,210		
114		F		FURNISH SIGN STRUCTURE (TRUSS)	KG	34,419		
115		F		INSTALL SIGN STRUCTURE (TRUSS) FURNISH LAMINATED PANEL SIGN (25.4 MM-TYPE	KG	34,419		
116	S			A) FURNISH SINGLE SHEET ALUMINUM SIGN (1.6 MM-	M2	90		
117	S			UNFRAMED)	M2	160		
118	S			FURNISH SINGLE SHEET ALUMINUM SIGN (2.0 MM-UNFRAMED)	M2	20		
119	S			FURNISH SINGLE SHEET ALUMINUM SIGN (1.6 MM-FRAMED)	M2	35		
120	S			FURNISH SINGLE SHEET ALUMINUM SIGN (2.0 MM-FRAMED)	M2	46		
121				1372 MM CAST-IN-DRILLED HOLE CONCRETE PILE (SIGN FOUNDATION)	M	22		
122				1524 MM CAST-IN-DRILLED HOLE CONCRETE PILE (SIGN FOUNDATION)	M	14		
123				ROADSIDE SIGN - ONE POST	EA	170		
124				ROADSIDE SIGN - TWO POST	EA	23		
125				750 MM BOTTOM PERFORATED HIGH DENSITY POLYETHELENE PIPE CONDUIT	M	72		
126				450 MM REINFORCED CONCRETE PIPE (CLASS III)	M	1,160		
127				600 MM REINFORCED CONCRETE PIPE (CLASS III)	M	950		
128				750 MM REINFORCED CONCRETE PIPE (CLASS III)	M	550		
129					M			
				900 MM REINFORCED CONCRETE PIPE (CLASS III)		110		
130				1050 MM REINFORCED CONCRETE PIPE (CLASS III)	M	81		
131				1200 MM REINFORCED CONCRETE PIPE (CLASS IV)	M	83		
132				GRATED LINE DRAIN	M	10		

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
133			В	600 MM WELDED STEEL PIPE CASING (BRIDGE)	M	25		
134				450 MM CONCRETE FLARED END SECTION	EA	2		
135				600 MM CONCRETE FLARED END SECTION	EA	2		
136				750 MM CONCRETE FLARED END SECTION	EA	1		
137				1200 MM CONCRETE FLARED END SECTION	EA	2		
138				ROCK SLOPE PROTECTION (LIGHT, METHOD B)	M3	240		
139				ROCK SLOPE PROTECTION (BACKING NO 1)	M3	480		
140				ROCK SLOPE PROTECTION (1/4T, METHOD B)	M3	810		
141		F	В	SLOPE PAVING (CONCRETE)	M3	155		
142				MINOR CONCRETE (DITCH LINING)	M3	10		
143				ROCK SLOPE PROTECTION FABRIC	M2	1,520		
144		F		MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	M3	1,636		
145				CURB RAMP DETECTABLE WARNING SURFACE	M2	22		
146		F		MISCELLANEOUS IRON AND STEEL	KG	8,954		
147		F		MANHOLE FRAME AND COVER	EA	10		
148		F	В	MISCELLANEOUS METAL (BRIDGE)	KG	4,790		
149		F	В	BRIDGE DECK DRAINAGE SYSTEM	LS	1		
150	S			CHAIN LINK FENCE (TYPE CL-1.8)	M	2,080		
151	S			CHAIN LINK FENCE (TYPE CL-1.8) WITH BARBED WIRE	M	190		
152	S			4.3 M CHAIN LINK GATE (TYPE CL-1.8)	EA	2		
153	S			7.3 M CHAIN LINK GATE (TYPE CL-1.8) WITH BARBED WIRE	EA	3		
154				SURVEY MONUMENT	EA	2		
155				DELINEATOR (CLASS 1)	EA	57		
156	S			METAL BEAM GUARD RAILING (WOOD POST)	M	150		
157		F	В	CHAIN LINK RAILING (TYPE 6)	M	210		
158		F	В	CONCRETE BARRIER (TYPE 26 MODIFIED)	M	211		
159	S			SINGLE THRIE BEAM BARRIER	M	140		

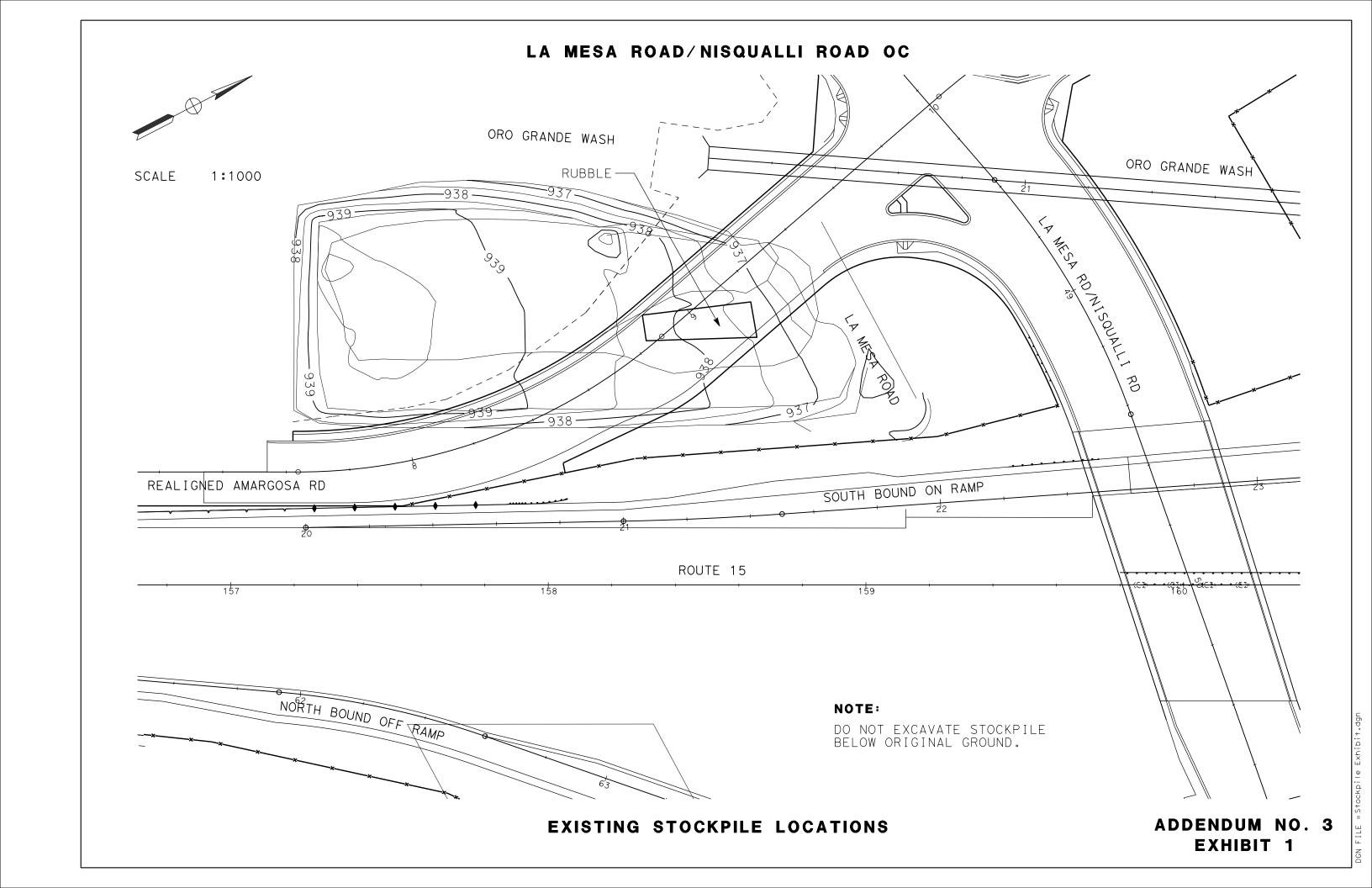
Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
160				CABLE RAILING	M	55		
161	S			TRANSITION RAILING (TYPE WB)	EA	4		
162	S			END ANCHOR ASSEMBLY (TYPE SFT)	EA	4		
163	S			ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	4		
164	S			ALTERNATIVE FLARED TERMINAL SYSTEM	EA	2		
165				CONCRETE BARRIER (TYPE 60)	M	39		
166				CONCRETE BARRIER (TYPE 60C)	M	130		
167				CONCRETE BARRIER (TYPE 736A)	M	180		
168				CALIFORNIA ST-40 BRIDGE RAIL	M	190		
169	S			THERMOPLASTIC PAVEMENT MARKING	M2	660		
170	S			THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	M	42,200		
171	S			PAINT TRAFFIC STRIPE (2-COAT)	M	780		
172	S			PAVEMENT MARKER (NON-REFLECTIVE)	EA	250		
173	S			PAVEMENT MARKER (RETROREFLECTIVE)	EA	1,790		
174	S			PAVEMENT MARKER (RETROREFLECTIVE- RECESSED)	EA	390		
175	S			MAINTAIN EXISTING TRAFFIC MANAGEMENT SYSTEMS DURING CONSTRUCTION	LS	1		
176	S			SIGNAL AND LIGHTING (LOCATION 1 - LA MESA RD/ AMARGOSA RD)	LS	1		
177	S			SIGNAL AND LIGHTING (LOCATION 2 - NB RAMPS)	LS	1		
178	S			SIGNAL AND LIGHTING (LOCATION 3 - SB RAMPS)	LS	1		
179	S			SIGNAL AND LIGHTING (LOCATION 4 - AMARGOSA RD/ LUNA RD)	LS	1		
180	S			SIGNAL AND LIGHTING (LOCATION 5 - NISQUALLI RD/ MARIPOSA RD)	LS	1		
181	S			SIGNAL REMOVAL (LOCATION 6 - LA MESA RD/ AMARGOSA RD)	LS	1		
182	S			SIGNAL REMOVAL (LOCATION 7 - NISQUALLI RD/ MARIPOSA RD)	LS	1		
183	S			LIGHTING AND SIGN ILLUMINATION	LS	1		
184	S			INTERCONNECTION CONDUIT AND CONDUCTOR	LS	1		
185	S			ELECTRIC SERVICE (IRRIGATION)	LS	1		
186	S			RAMP METER SYSTEM (LOCATION 1 - NB)	LS	1		

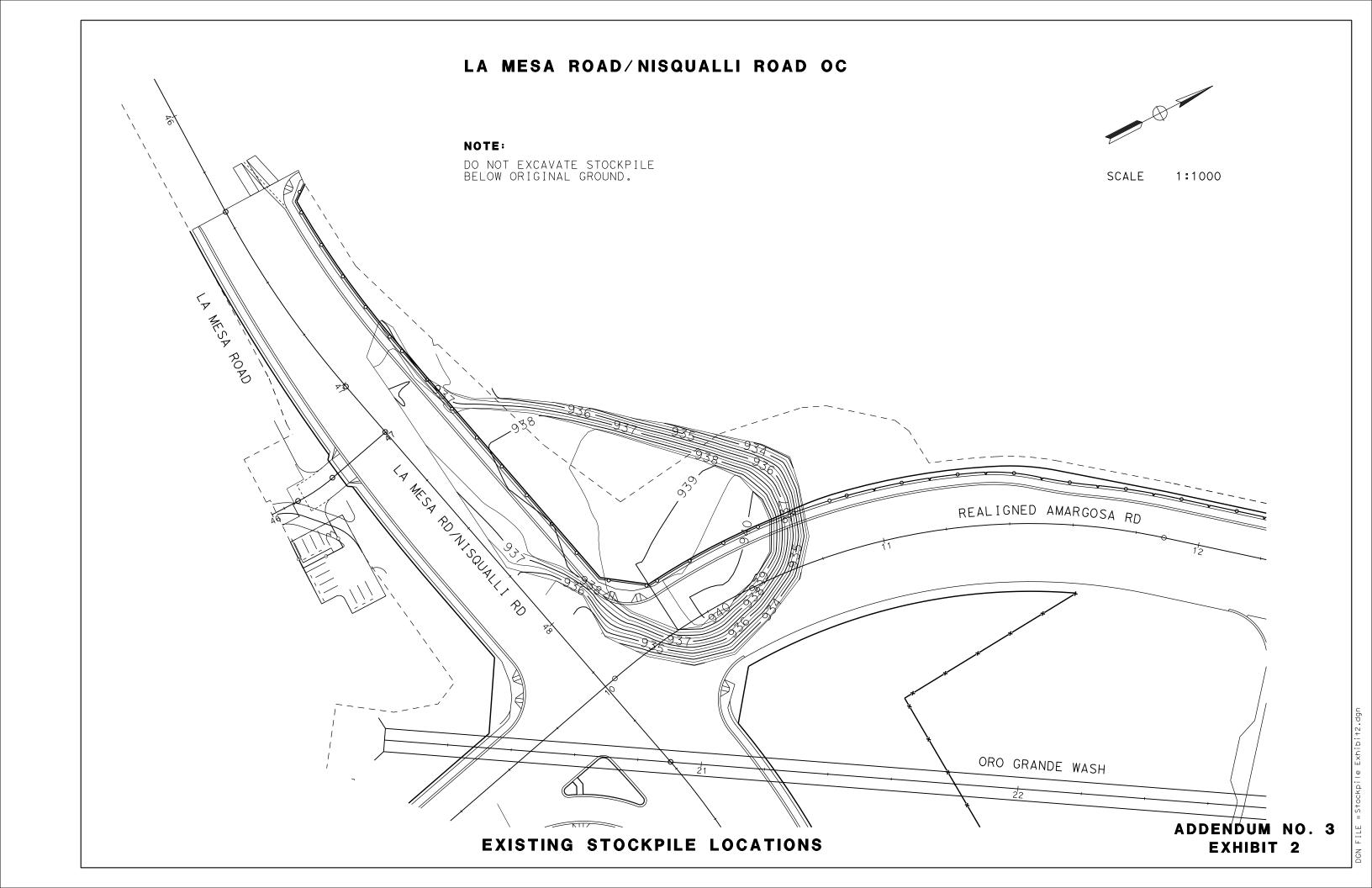
SAN BERNARDINO ASSOCIATED GOVERNMENTS BID ITEMS C12010 (Revised Addendum # 3)

(Revised Addendum # 3)										
Item	S	F	B	Item Description	Unit	Quantity	Unit Price	Amount		
187	S			RAMP METER SYSTEM (LOCATION 2 - SB)	LS	1				
188				MOBILIZATION (Max 10% of BID AMOUNT)	LS	1				
		7	The	following Bid Items (# 189 to # 258) Reflect			in Plan Sets B, C	and D and		
	Special Provisions Book 3 of 3									
		Π	<u> </u>	(Items 189 through 225	relate	to Plan Set	В)			
189				2-inch Water Service	EA	4				
190				8-inch Water Service	EA	1				
191				Temporary Blow-Off Assembly	EA	9				
192				Fire Service Assembly	EA	5				
193				AC Pavement Repair	SF	2,715				
194				8-inch Main PVC OR DI (incl. Excav., Backfill & Pav'mt)	LF	1,229				
195				12-inch Main PVC OR DI (incl. Excav., Backfill & Pav'mt)	LF	7,250				
196				16-inch Main PVC OR DI (incl. Excav., Backfill & Pav'mt)	LF	1,635				
197				16 inch CML&C (incl. Excav., Backfill & Pav'mt)	LF	491				
198				Pipe Support with Anchors in Bridge	EA	28				
199				Joint Restraint	LF	3,083				
200				4 inch DIP CL 350 or PVC C-900 CL 200 Water Line	LF	61				
201				12 inch CML&C (incl. Excav., Backfill & Pav'mt)	LF	88				
202				28 inch Fully Welded 0.25 inch Steel Casing Pipe	LF	68				
203				8 inch DI Elbow	EA	6				
204				8 inch x12 inch x12 inch DI Flanged Tee	EA	2				
205				12 inch x12 inch x12 inch DI Flanged Tee	EA	2				
206				12 inch x12 inch x 16 inch x 16 inch DI Flanged Tee	EA	1				
207				12 inch DI Elbow	EA	7				
208			_	16 inch DI Elbow	EA	8				
209				16 inch x 12 inch DI Eccentric Device	EA	2				
210				8 inch x 6 inch DI Eccentric Reducer	EA	1				
211				12 inch x 8 inch DI Eccentric Reducer	EA	1				

Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount
212				8 in x 8 in x 8 in DI Flanged Tee	EA	1		
213				Flex Coupler	EA	10		
214				4 inch DIP CL Elbow	EA	1		
215				2-inch Air Vacuum/Release Valve	EA	3		
216				6 inch Blow off Assembly	EA	1		
217				8 inch Resilient Seated Gate Valve	EA	5		
218				12-inch Valve	EA	16		
219				16-inch Valve	EA	2		
220				Hot Tap with 12 inch Tapping Valve	EA	1		
221				Portland Cement Concrete Thrust Block	EA	10		
222				Guard Post	EA	4		
223				6-inch Fire Hydrant Assembly	EA	13		
224				6 inch Blow off Fire Hydrant	EA	3		
225				Double Ball Expansion Assembly	EA	2		
		I		(Items 227 through 242	relate 1	to Plan Se	t C)	
227				Remove MH Frame & Cover - Filled with sand & capped	EA	9		
228				8" Slurry Fill (Abandoned sewer lines)	LF	363		
229				10" Slurry Fill (Abandoned sewer lines)	LF	934		
230				15" Slurry Fill (Abandoned sewer lines)	LF	1,061		
231				6-inch PVC Lateral	LF	55		
232				8-inch PVC (incl. Excavation, Backfill & Pavement)	LF	7,227		
233				24-inch PVC (incl. Excavation, Backfill & Pavement)	LF	1,322		
234				Cleanout Assembly	EA	1		
235				Casing Spacers/Pipe Supports for 24" Sewer in Bore	EA	51		
236				24-inch DIP with Lining and Restrained Joints	LF	428		
237				36" steel sleeve (Jack & Bore)	LF	391		
237.5				72" Reinforced Concrete Pipe	LS	1		

	(Revised Addendum # 3)								
Item	S	F	В	Item Description	Unit	Quantity	Unit Price	Amount	
238				8" PVC PLUG	EA	3			
					277				
239				End Seal for 24" Sewer in Bore	EA	2			
240				Drop Manholes (60-inch Diameter)	EA	2			
241				Manholes (48-inch Diameter)	EA	32			
242				Manholes (60-inch Diameter)	EA	6			
2-72				(Items 244 through 258			t D)		
				, , , , , , , , , , , , , , , , , , ,			<u> </u>		
244				Trench Cuts	LF	16,360			
245				Aggregate Base	SF	8,100			
246				AC Pavement	SF	7,900			
247				PCC Sidewalk	SF	500			
248				PCC Curb & Gutter	LF	100			
249				2-3 inch Conduits	LF	30,010			
250				Pull Boxes (Vaults)	EA	76			
251				Backfill and Hand Compact Conduit & Bring Pull Boxes to Finished Grade	LF	16,360			
252				Pull Boxes Covers	EA	76			
253				SMFO Cable 12 Strand (E)	LF	2,500			
254				SMFO Cable 24 Strand (F)	LF	12,500			
255				SMFO Cable 48 Strand (H)	LF	2,000			
256				SMFO Cable 72 Strand (K)	LF	7,600			
257				Splice, Test fiber	LS	1			
258				Fiber Patch Panels and Hardware	EA	5			
				TOTAL					



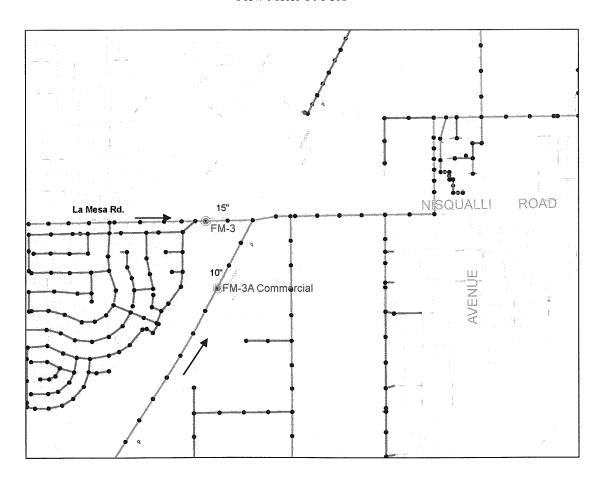


2.3 FLOW METER FM-3

This meter will be installed in a 15" line and will measure wastewater flows generated west of I-15 in the southern part of the service area. Land use is predominantly single-family residential; however some commercial land use located on Bear Valley Rd. west of the freeway is also tributary.

2.4 FLOW METER FM-3A

This meter will measure flows generated along Amargosa Rd. between La Mesa Rd. and Bear Valley Rd. in the southern part of the service area. The meter is located in a 10" line under Armargosa Rd. The sole intent of this meter is to determine unit employee wastewater flows and diurnal patterns for commercial land uses.



Flow Meter FM-3A

3.4.3.3 FM-3

Flow Meter ID: FM-3

Manhole Name: W46-105

Pipe Diameter (inches): 15

Daily Max. Volume (MG): 0.63

Daily Min. Volume (MG): 0.53

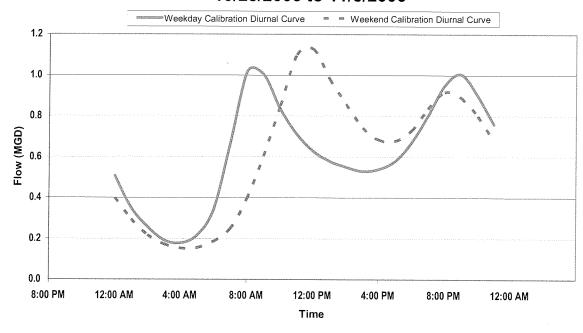
Daily Avg. Volume (MG): 0.59

Description of Pipe: 15" inlet from ca

Description of Pipe: 15" inlet from east **Predominant Land Use:** Residential

Figure 3-18 Calibration Diurnal Curves for Weekdays and Weekends at W46-105

Calibration Diurnal Curve at Manhole W46-105 (FM-3) 10/25/2006 to 11/5/2006

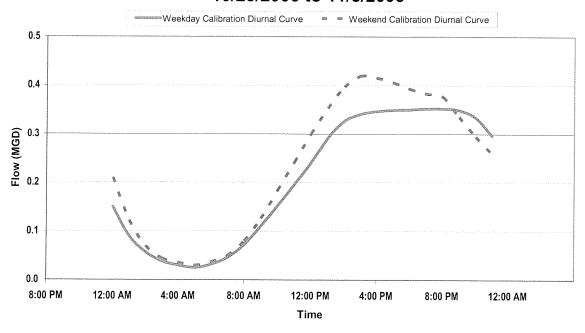


3.4.3.4 FM-3A

Flow Meter ID: FM-3A Manhole Name: W46-137 Pipe Diameter (inches): 10 Daily Max. Volume (MG): 0.23 Daily Min. Volume (MG): 0.18 Daily Avg. Volume (MG): 0.20 10" inlet from **Description of Pipe:** Southwest **Predominant Land Use:** Commercial

Figure 3-19 Calibration Diurnal Curves for Weekdays and Weekends at MH W46-137

Calibration Diurnal Curve at Manhole W46-137 (FM-3A) 10/25/2006 to 11/5/2006





SAN BERNARDINO ASSOCIATED GOVERNMENTS INTERSTATE 15/LA MESA/NISQUALLI INTERCHANGE PROJECT SANBAG CONTRACT NO. C12010

SUPPLEMENTAL INFORMATION MATERIALS HANDOUT (Addendum # 3)

Possible Material Availability

Agency has presently stockpiled approximately 87,300 m³ of material at various locations within the project site as "Local Borrow" (See Addendum # 3 Exhibits 1, 2, and 3). Stockpiled material includes oversize rubble of broken concrete and asphalt; see the section "Possible Unsuitable Materials" below and "Disposal of Oversize Rubble" in Addendum # 3.

Possible Unsuitable Materials

Debris piles likely to contain unsuitable material ("Oversize Rubble") as defined in Section 19-2.02 of the Standard Specifications exist within the limits of the project site. Representative photographs of the materials which may be found in/on or under the stockpiles on site are included below.

Provision of this information shall not be construed as relieving the bidder of any responsibilities regarding examination of site of work as required under Section 2-1.03 of the Standard Specifications.

Provision of the foregoing information is made without guarantee of material availability or suitability. Neither is it guaranteed that material already stockpiled is suitable or has been placed in a manner that will comply with all contract requirements.



Looking Easterly

